One-year follow-up of implant supported fixed partial denture on a patient with oligodontia

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Oligodontia is defined as the absence of 6 or more permanent teeth due to the hypo-development of tooth germs. Patients with oligodontia may have unpleasant appearance, impaired mastication and speech difficulties. Dental prosthetic treatments, including implants, removable prostheses, fixed dentures and adhesive techniques have been proven effective in the management of these patients. The use of osseointegrated implants to aid in restoring missing teeth has become the treatment of first choice, especially for adult patients. In the present case report, the patient was 30 years old man with oligodontia. This patient complained of esthetic dissatisfaction because of congenital missing teeth. Considering prosthetics, he had insufficient anterior prosthetic space because of severe wear on occlusal surface of posterior teeth as the growth process was completed. The osseointegrated dental implant can be used successfully in partially edentulous arches affected by congenital missing. Considering economic concern, we decided on keeping mandibular prosthesis. After diagnostic wax-up was made and analyzed, the vertical dimension of 3 mm from the central incisor was decided to raise for esthetic and functional rehabilitation and to have the adaptation period with maxillary provisional prosthesis. During 3 months of observation period, occlusal stability and TMJ were periodically checked and it was confirmed that the patient has no pathologic sign and symptoms. Internal-type implants (Osstem, Seoul, Korea) were placed at the sites of both maxillary first premolar, both maxillary central incisor with ridge split technique and ramal bone graft following the delayed loading procedure. Maxillary posterior teeth was to be restored with monolithic zirconia fixed partial denture, anterior missing area were restored with porcelain-fused zirconia implant prosthesis using CAD/CAM technique. The prostheses were designed using mutually protected occlusion. Oral hygiene instruction and regular check-up were administrated.

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Augmentation of severely resorbed maxilla-mandibular alveolar ridges for implant rehabilitations

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Loss of teeth results in resorption of the alveolar process and, in more advanced stages, resorption of the underlying basal bone. A severely resorbed maxilla and mandible generally results in problems for the prosthesis, such as insufficient retention, pain by overloading the mucosa, impaired masticatory function, speech difficulties, loss of soft tissue support, altered facial appearance and psychosocial problems. Reconstruction of a moderated resorbed maxilla and/or mandibular alveolar ridges to restore oral function does not remain as a surgical and prosthetic challenge due to the possibility to easily restore the minimal amount of residual bone support with conventional sinus lift, onlay grafts or even with zygomatic implants. On the other hand, when the maxillary ridges present with anatomical changes or severely resorbed it still be critical to place implants without considering great bone reconstructions. The purpose of this presentation is to report a case series of patients with severely resorbed maxilla and mandible. These cases were treated lifting and grafting the areas using a mixed graft of BMP and bovine demineralized bone and mash, as an option of uses of zygomatic implants or positional/onlay autogenously bone grafts.

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